

CIRCUIT SUBSTRATE MATERIAL, CIRCUITS COMPRISING THE SAME, AND
METHOD OF MANUFACTURE THEREOF

ABSTRACT OF THE DISCLOSURE

[0054] An electrical circuit material having a conductive layer disposed a substrate, wherein the substrate is formed from a thermosetting composition comprising a polybutadiene or polyisoprene resin; an optional, functionalized liquid polybutadiene or polyisoprene resin; an optional butadiene- or isoprene-containing copolymer; an optional low molecular weight polymer; an optional curing agent; a cross-linking agent; a particulate fluoropolymer; and about 20 to about 50 percent by weight, based on the total weight of the thermosetting composition, of a magnesium hydroxide having a low ionic content. Use of magnesium hydroxide allows the composition to attain a high level of flame retardancy without use of halogenated flame retardants, while maintaining good moisture absorption and other physical properties.